

August, 23 2004

NE NPR-A Amendment Planning Team
Bureau of Land Management (930)
Alaska State Office
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Dear Planning Team:

As ornithologists and other wildlife professionals¹, we submit this letter² as part of the record of public comments on the Bureau of Land Management's (BLM) June 2004 draft integrated activity plan and environmental impact statement for Northeast National Petroleum Reserve-Alaska ("Reserve").

The northeastern portion of the National Petroleum Reserve-Alaska has exceptional wildlife values, including:

- the Teshekpuk Lake area, which is one of the most important wetland complexes and goose molting habitats in the entire circumpolar Arctic;
- the Colville River, which has some of the highest densities of nesting peregrine falcons, rough-legged hawks and other raptors in the world;
- nesting habitat for spectacled eiders, which are listed as threatened under the Endangered Species Act, and yellow-billed loons, king eiders, long-tailed ducks, buff-breasted sandpipers, and dunlin, which are on the Audubon *WatchList* because their populations are thought to be vulnerable or declining; and
- the Teshekpuk Lake Caribou Herd, which is the most important herd for subsistence harvests by Alaska Natives living on the North Slope.

Given that BLM is proposing to open a large proportion of the Teshekpuk Lake Surface Protection Area to oil and gas activity, our immediate concern and the focus of this letter is the Teshekpuk Lake area—its importance to molting geese and the potential impacts of large-scale oil and gas activity.

For more than 40 years, the area north and east of Teshekpuk Lake has been recognized for its importance to molting geese (King 1970³). This area is remote, has deep-water lakes where flightless geese can escape predators, and offers sedges and grasses as high-quality forage (Derksen et al. 1982⁴). With these attributes, the area attracts up to 37,000 brant, 35,000 greater white-fronted geese, and thousands of Canada and snow geese in July and

¹ This letter represents the viewpoints of the individual scientists listed below. Institutional affiliations are listed for identification purposes only, and do not in any way constitute an endorsement of this letter, nor does this letter necessarily reflect the views and opinions of the affiliated organizations.

² For informational purposes, contact Audubon Alaska, 715 L Street, Suite 200, Anchorage, AK 99501.

³ King, J.G. 1970. The swans and geese of Alaska's Arctic slope. *Wildfowl* 21:11-17.

⁴ Derksen, D.V., W.D. Eldridge and M.W. Weller. 1982. Habitat ecology of Pacific brant and other geese moulting near Teshekpuk Lake, Alaska. *Wildfowl* 33:39-57.

August for their annual molt (Mallek 2004⁵). For brant, this number represents as much as 30 percent of the entire Pacific Flyway population, with birds originating from Alaska's North Slope and Yukon-Kuskokwim Delta, the western Canadian Arctic, and Wrangell Island in Russia (Bollinger and Derksen 1996⁶).

004
Birds

The sensitivity of geese during their flightless, energy-demanding molt is well established (Derksen et al. 1979⁷). Molting geese will run at the sight of a distant person, and disturbance by aircraft overhead—to which brant apparently do not habituate—is a major problem (Jensen 1990⁸, Miller et al. 1994⁹). Behavioral responses to disturbance add stress to the already-taxing requirements of molting geese (Jensen 1990, Taylor 1995¹⁰).

005
Birds

Reductions in feeding time or excessive energy expenditures ultimately may compromise fitness and, hence, survival or reproductive success (Taylor 1993¹¹). The combined effects of industrial oil development in the Teshekpuk Lake area and the northward advance of woody vegetation due to climate warming in the Arctic (Sturm et al. 2001¹²) may shrink habitat available to molting geese and displace them to less optimal habitats. The likely result would be reduced populations of brant and possibly other species, such as greater white-fronted goose.

006
Birds

We note that brant in the Pacific Flyway are well below desired population levels and are important to subsistence hunters on the North Slope, Yukon-Kuskokwim Delta, and Bristol Bay, and also to sport hunters on the Alaska Peninsula (e.g., at Izembek Lagoon), from Washington to California, and Mexico. Any significant reductions in numbers of brant could trigger restrictions or closures of both subsistence and sport harvests (Pacific Flyway Council 2002¹³).

007
Birds

In January 1998, the Pacific Flyway Council (Greer 1998¹⁴), consisting of waterfowl biologists and wildlife managers from state and provincial wildlife agencies, reached the following conclusions:

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- ⁵ Mallek, E.J. 2004. Teshekpuk Lake area molting goose survey - 2003. unpubl. report, U.S. Fish and Wildlife Fairbanks, Alaska.
- ⁶ Bollinger, K.S. and D.V. Derksen. 1996. Demographic characteristics of molting black brant near Teshekpuk Lake, Alaska. *Journal of Field Ornithology* 67:141-158.
- ⁷ Derksen, D.V., M.W. Weller and W.D. Eldridge. 1979. Distributional ecology of geese molting near Teshekpuk Lake, National Petroleum Reserve-Alaska. pp. 189-207 in R.L. Jarvis and J.C. Bartonek (eds.). *Management and Biology of Pacific Flyway Geese*. Oregon State University Bookstores, Corvallis, OR.
- ⁸ Jensen, K.C. 1990. Responses of molting Pacific black brant to experimental disturbance in the Teshekpuk Lake Special Area, Alaska. Ph.D. thesis. Texas A&M University, College Station, Texas.
- ⁹ Miller, M.W., K.C. Jensen, W.E. Grant and M.W. Weller. 1994. A simulation model of helicopter disturbance of molting Pacific black brant. *Ecological Modeling* 73:293-309.
- ¹⁰ Taylor, E.J. 1995. Molt of black brant (*Branta bernicla nigricans*) on the Arctic Coastal Plain, Alaska. *Auk* 112:904-919.
- ¹¹ Taylor, E.J. 1993. Molt and bioenergetics of Pacific black brant (*Branta bernicla nigricans*) on the Arctic Coastal Plain, Alaska. Ph.D. dissertation, Texas A&M University, College Station, Texas.
- ¹² Sturm, M., C. Racine, and K. Tape. 2001. Increasing shrub abundance in the Arctic. *Nature* 411:546-547.
- ¹³ Pacific Flyway Council. 2002. Pacific flyway management plan for Pacific brant. Unpubl. report, Pacific Flyway Study Committee, c/o U.S. Fish & Wildlife Service, DMBM, Portland, OR.
- ¹⁴ J. Greer. 1998. Letter to Secretary of the Interior Bruce Babbitt in regard to proposed oil and gas leasing plan for the Northeast Planning Area, National Petroleum Reserve-Alaska. Pacific Flyway Council.

007 (Cont'd)
Birds

Eventual development of oil and gas fields associated with structures and disturbance in or near this area [Teshekpuk Lake] could have significant, long-term impacts on unique habitats used by geese, and the condition and survival of molt-stressed brant.

The sensitive goose molting area should not be offered for leasing; it should not be open to construction of roads, pipelines, or other facilities; and seasonal human activity should be restricted, as necessary, to preserve the security of molting geese from disturbance and stress.

008
Special
Designation

The Pacific Flyway Council also recommends that the Teshekpuk Lake Special Area be given permanent protection from future development by Secretarial designation.

009
Basic

More recently, BLM (2003)¹⁵ stated:

BLM has conducted various scientific studies on the biological resources of the area in cooperation with the North Slope Borough, the State of Alaska and other federal agencies. Information gained since the completion of the NE plan [referring to the original plan in 1998] has led BLM to conclude that it is appropriate to consider amending it.

Unfortunately, we are not aware of any new studies that would lead to a scientifically-defensible conclusion that the harmful effects of oil and gas activities in and around the goose molting north and east of Teshekpuk Lake can be avoided or mitigated. Only last year the National Research Council (2003¹⁶) concluded:

If development moves into the Teshekpuk Lake area of the National Petroleum Reserve-Alaska, molting waterfowl could be adversely affected, especially brant.

010
Alternatives

We appreciate that BLM recognizes the need to preclude oil and gas development in an area of 213,000 acres north and east of Teshekpuk Lake in order to protect molting geese. The 213,000-acre no-lease zone, however, is too small to encompass all the essential habitat used by molting geese, and, because the environmental effects of oil development extend well beyond the immediate "footprint" of an oilfield (National Research Council 2003)—particularly as a result of aircraft overflights—the functionally protected area will be even smaller. The proposed 213,000-acre no-lease zone also is too small to encompass essential habitats for caribou having calves or seeking relief from insects, nor does it provide adequate protection for nesting birds, which are vulnerable to increased numbers of predators (e.g., gulls, ravens and foxes) attracted to Arctic oilfields (e.g., Truett, J.C. and S.R. Johnson 2000¹⁷).

¹⁵ Bureau of Land Management [BLM]. 2003. Notice of Intent to amend the Northeast National Petroleum Reserve-Alaska Integrated Activity Plan... Federal Register 68:37173-37174.

¹⁶ National Research Council. 2003. Cumulative environmental effects of oil and gas activities on Alaska's North Slope. The National Academies Press, Washington, DC.

¹⁷ Truett, J.C. and S.R. Johnson (eds.). 2000. The natural history of an Arctic oil field. Academic Press, San Diego, CA.

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We recognize the nation's need for increased domestic supplies of energy and are not opposed to additional oil and gas leasing in the Reserve, provided there is permanent protection for the very most important wildlife habitats and that oil and gas activities are carried out with the highest environmental safeguards. However, BLM should reject its preferred alternative, which would allow oil and gas development in all but 213,000 acres of what is now the 857,859-acre Teshekpuk Lake Surface Protection Area. Instead, we favor Alternative A— No Action— which maintains the existing, appropriate balance between oil and gas development and protection of wildlife and their habitats in the northeast Reserve. The entire Teshekpuk Lake Surface Protection Area should be retained and given permanent protection, including the current no-lease zone of 588,998 acres and the no-surface-activity zone of 268,861 acres.

Thank you for considering these comments.

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